

St. Andrews Scots Sr. Sec. School

9th Avenue, I.P. Extension, Patparganj, Delhi -110092

Session: 2025-2026

Class: V

Subject: Mathematics

Topic: Unit -10 (Percentage)

Ex-1 Q.1a,c,e ; Q.2a,c,e ; Q.3a,c,e ; Q.4a,c,e (Notebook)

Ex -2 Q.1,3,5,7,8 (Notebook)

Ex -3 Q.1a,c ; Q.3a,c,e,h ; Q.4a,c (Notebook)

Q.2+ Mental maths corner (H.W.)

Worksheet

Lesson-10 : Percentage

Warm Up

1. The fraction for blue coloured squares = $\frac{36}{100}$
2. The fraction for red coloured squares = $\frac{28}{100}$
3. The fraction for green coloured squares = $\frac{20}{100}$
4. The fraction for yellow coloured squares = $\frac{16}{100}$

Exercise-1

- (a) $\frac{1}{10} = \frac{1}{10} \times 100\% = \frac{100}{10}\% = 10\%$

(b) $54 = 54 \times 100\% = 5400\%$

(c) $\frac{9}{27} = \frac{9}{27} \times 100\% = \frac{900}{27}\% = \frac{100}{3}\% = 33\frac{1}{3}\%$

(d) $\frac{37}{10} = \frac{37}{10} \times 100\% = \frac{3700}{10}\% = 370\%$

(e) $4\frac{1}{11} = 4\frac{1}{11} \times 100\% = \frac{45}{11} \times 100\% = \frac{4500}{11}\% = 409\frac{1}{11}\%$
- (a) $0.05 = 0.05 \times 100\% = 5\%$ (b) $0.95 = 0.95 \times 100\% = 95\%$

(c) $1.07 = 1.07 \times 100\% = 107\%$ (d) $32.2 = 32.2 \times 100\% = 3220\%$

(e) $213.5 = 213.5 \times 100\% = 21350\%$
- (a) $140\% = \frac{140}{100} = \frac{140 \div 20}{100 \div 20} = \frac{7}{5} = 1\frac{2}{5}$ (HCF of 140 and 100 = 20)

(b) $33\frac{1}{3}\% = \frac{100}{3}\% = \frac{100}{3 \times 100} = \frac{1}{3}$

(c) $9\frac{1}{3}\% = \frac{28}{3}\% = \frac{28}{3 \times 100} = \frac{28}{300} = \frac{28 \div 4}{300 \div 4} = \frac{7}{75}$
(HCF of 28 and 300 = 4)

(d) $125\% = \frac{125}{100} = \frac{125 \div 25}{100 \div 25} = \frac{5}{4} = 1\frac{1}{4}$ (HCF of 125 and 100 = 25)

(e) $11\frac{1}{9}\% = \frac{100}{9}\% = \frac{100}{9 \times 100} = \frac{1}{9}$
- (a) $97\% = \frac{97}{100} = 0.97$ (b) $150\% = \frac{150}{100} = 1.5$

(c) $345\% = \frac{345}{100} = 3.45$ (d) $425\% = \frac{425}{100} = 4.25$

(e) $30.5\% = \frac{30.5}{100} = 0.305$

Exercise-2

1. $10 \text{ paise} = \frac{10}{100}$ of a rupee = 10% of a rupee
2. $800 \text{ m} = \frac{800}{1000}$ of a km = $\frac{80}{100}$ of a km = 80% of a km
3. $550 \text{ ml} = \frac{550}{1000}$ of a l = $\frac{55}{100}$ of a l = 55% of a l
4. $146 \text{ days} = \frac{146}{365}$ of a year = $\frac{146}{365} \times 100\%$ of a year = $\frac{2}{5} \times 100\%$ of a year
= 40% of a year
5. $60 \text{ cm} = \frac{60}{100}$ of a m = 60% of a m
6. $125 \text{ g} = \frac{125}{1000}$ of a kg = $\frac{12.5}{100}$ of a kg = 12.5% of a kg
7. $40 \text{ minutes} = \frac{40}{60}$ of an hour = $\frac{40}{60} \times 100\%$ of an hour
= $\frac{2}{3} \times 100\%$ of an hour = $66\frac{2}{3}\%$ of an hour
8. $350 \text{ mg} = \frac{350}{1000}$ of a g = $\frac{35}{100}$ of a g = 35% of a g

Exercise-3

1. (a) (ii) Number of girls = 40% of 850 = $\frac{40}{100} \times 850 = \frac{40 \times 850}{100} = 340$
 Number of boys = Total number of students – Number of girls
 = 850 – 340 = 510

- (b) (iv) Quantity of water drained out = 28% of 1550 l

$$= \frac{28}{100} \times 1550 \text{ l} = \frac{28 \times 1550}{100} \text{ l} = 434 \text{ l}$$

$$\text{Quantity of water left in the tank} = 1550 \text{ l} - 434 \text{ l} = 1116 \text{ l}$$

- (c) (iii) Total number of Hindi and English books = 4850

$$\begin{aligned} \text{Number of Hindi books} &= 42\% \text{ of } 4850 = \frac{42}{100} \times 4850 \\ &= \frac{42 \times 4850}{100} = 2037 \end{aligned}$$

$$\text{Number of English books} = 4850 - 2037 = 2813$$

2. The triangle is divided into 9 equal parts.

Of these, 6 parts are coloured.

$$\text{Required percentage} = \frac{6}{9} \times 100\% = \frac{200}{3}\% = 66\frac{2}{3}\%$$

3. (a) 10% of 250 km = $\frac{10}{100} \times 250 \text{ km} = \frac{2500}{100} \text{ km} = 25 \text{ km}$

$$(b) 0.5\% \text{ of } 200 \text{ ml} = \frac{0.5}{100} \times 200 \text{ ml} = \frac{0.5 \times 200}{100} \text{ ml} = 1 \text{ ml}$$

$$(c) 15\% \text{ of } 1500 \text{ m} = \frac{15}{100} \times 1500 \text{ m} = \frac{22500}{100} \text{ m} = 225 \text{ m}$$

$$(d) 42\% \text{ of } 600 \text{ g} = \frac{42}{100} \times 600 \text{ g} = \frac{25200}{100} \text{ g} = 252 \text{ g}$$

$$(e) 35\% \text{ of } 120 \text{ days} = \frac{35}{100} \times 120 \text{ days} = \frac{4200}{100} \text{ days} = 42 \text{ days}$$

$$(f) 4\frac{1}{2}\% \text{ of } 2400 \text{ l} = \frac{9}{2}\% \text{ of } 2400 \text{ l} = \frac{9}{2 \times 100} \times 2400 \text{ l} = \frac{9 \times 2400}{2 \times 100} \text{ l} = 108 \text{ l}$$

$$(g) 90\% \text{ of } ₹ 2700 = \frac{90}{100} \times ₹ 2700 = ₹ \frac{90 \times 2700}{100} = ₹ 2430$$

$$(h) 14\frac{2}{7}\% \text{ of } 560 \text{ kg} = \frac{100}{7}\% \text{ of } 560 \text{ kg} = \frac{100}{7 \times 100} \times 560 \text{ kg} = \frac{560}{7} \text{ kg} = 80 \text{ kg}$$

4. (a) Required percentage = $\frac{6 \text{ hours}}{1 \text{ day}} \times 100\% = \frac{6 \text{ hours}}{24 \text{ hours}} \times 100\%$

$$= \frac{6}{24} \times 100\% = \frac{600}{24}\% = 25\%$$

$$(b) \text{ Required percentage} = \frac{30 \text{ l}}{240 \text{ l}} \times 100\% = \frac{30}{240} \times 100\% = \frac{3000}{240}\% = 12\frac{1}{2}\%$$

$$(c) \text{ Required percentage} = \frac{44 \text{ kg}}{66 \text{ kg}} \times 100\% = \frac{44}{66} \times 100\% = \frac{2}{3} \times 100\% = 66\frac{2}{3}\%$$